

TENDER

TENDER NOTIFICATION NO. - FCX/19201014

FOR

Structural steel repair/ renovation / modification work inside
factory premises.

PRICE BID

**FACTORY CIVIL CONSTRUCTION & MAINTENANCE DIVISION
BHARAT HEAVY ELECTRICALS LIMITED**

**(A Government of India Undertaking)
BHOPAL – 462 022 (M.P)**

PREAMBLE OF PRICE BID

1.0 This Price Bid consists of Three Schedule:

1.1 Schedule A

Schedule A consists of Two Annexure:

Total price of the package combining Annexure I & Annexure II to be quoted by the bidders which shall form the basis for comparison for deciding lowest bid. For further processing and award, total quoted amount by the L1 (lowest) bidder for the package shall be used for deriving individual item rate by BHEL based on % (percentage) weightage specified at Annexure-I & Annexure II of Price Schedule.

1.2 Schedule B

It consists of details of free issue materials by BHEL.

1.3 Schedule C

It consists of details of tools & tackles provided by BHEL either on higher basis or on free of cost basis which are mentioned in price bid.

2.0 The work to be carried out under the contract shall, except as otherwise provided in tender conditions, include all labour, materials, tools, plant, equipment, and transport which may be required in preparation of and for full & entire execution and completion of the Works. The descriptions given in the Schedule of Quantities shall, unless otherwise stated, be held to include waste on materials, carriage and cartage, carrying in return of empties, hoisting, setting, fitting and fixing in position and all other labours necessary in and for the full and entire execution and completion as aforesaid in accordance with good practice and recognized principles as laid down in Technical Specification & elsewhere in Tender

3.0 The price bid should not contain any condition. Conditional price Bids shall be summarily rejected.

4.0 The bidder should not leave any column blank in Price Schedules.

5.0 Price Quoted shall include all taxes, & duties except **GST**.

6.0 Unless otherwise specified in the items involving cement, reinforcement steel or structural steel, these items shall be issued free of cost by BHEL.

FACTORY CIVIL CONSTRUCTION & MAINTENANCE DIVISION

NIT No: FCX/19201014

Price Schedule

Name of work: Structural steel repair/ renovation / modification work inside factory premises.

SUMMARY

Details ANNEXURE	Total Amount (Rs.)
Total of ANNEXURE (I) & ANNEXURE (II)	

Amount in words: Rs.

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Total price of the package combining Annexure -I & Annexure -II to be quoted by the bidders which shall form the basis of comparison for deciding lowest bid.

For further processing & award total quoted Amount for the package by the L1 (lowest) bidder shall be used for deriving Individual item rate by BHEL based on % (percentage) weightage specified at Annexure -I & Annexure -II of Price Schedule.

Seal & Signature of Contractor

FACTORY CIVIL CONSTRUCTION & MAINTENANCE DIVISION

NIT No: FCX/19201014

Price Schedule A : Annexure I

Name of work : Structural steel repair/renovation/ modification work inside factory premises.

S.No.	DSR12	Description of item	Qty.	Unit	% Weightage of item amount against total amount
1		Carriage of materials by mechanical transport including loading, unloading and stacking -			
(a)	1.1.1	Lime ,moorum, building rubbish	1.00	cum	0.0058
(b)	1.1.2	Earth	3.00	cum	0.0216
(c)	1.1.11	Steel 1 km. lead	2.00	tonne	0.0103
2		Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas (exceeding 30cm in depth. 1.5 m in width as well as 10 sqm on plan) including disposal of excavated earth, lead upto 50m and lift upto 1.5m, disposed earth to be levelled and neatly dressed.			
	2.6.1	All kinds of soil.	3.00	cum	0.0338
3	** Ana	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level: (Cement free issue by BHEL)			
	4.1.3	1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size).	3.00	cum	0.6737
4	** Ana	Providing and laying in position specified grade of reinforced cement concrete excluding the cost of centering, shuttering, finishing and reinforcement - All work upto plinth level. (Cement free issue by BHEL)			
	5.1.2	1 : 1.5 : 3 (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size).	15.00	cum	3.5251
5		Centering and shuttering including strutting, propping, etc. and removal of form for:			
	5.9.1	Foundations, footings, bases of columns, etc. for mass concrete.	30.00	sqm	0.4066
6		Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto plinth level :(Reinforcement bars will be supplied free of cost from BHEL store).			
	Ana. 5.22.6	Thermo-Mechanically Treated bars.	450.00	Kg	0.2903
7	Ana. 10.1	Structural steel work in single section fixed without connecting plate including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete. (Structural steel & primer will be issued free of cost from BHEL stores). (Note:- The fabrication and erection of structural steel work upto a height of 8.0 metres shall be paid under this item.)	4500.00	Kg	3.1183

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Price Schedule A : Annexure I

Name of work : Structural steel repair/renovation/ modification work inside factory premises.

S.No.	DSR12	Description of item	Qty.	Unit	% Weightage of item amount against total amount
8	Ana. 10.2	Structural steel work riveted ,bolted or welded in built up sections, trusses and framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete. (Structural steel & primer will be issued free of cost from BHEL stores). (Note:- The fabrication and erection of structural steel work upto a height of 8.0 metres shall be paid under this item.)	64430.00	Kg	73.2887
9	Ana. 13.50.3	Applying priming coat With ready mixed red oxide zinc chromate primer of approved brand and manufacture on steel galvanised iron/ steel works (Excluding cost of primer which shall be issued free of cost from BHEL store).	150.00	sqm	0.2151
10	Ana 13.61.1	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade. (Paint free issue from BHEL store.) Two or more coats on new work.	1800.00	sqm	5.562
11	Ana 13.63.1	Painting with aluminium paint of approved brand and manufacture to give an even shade: (Excluding cost of Aluminium paint and putty which shall be issued free of cost from BHEL store). Two or more coats on new work	180.00	sqm	0.5664
12	Ana 14.20	Fixing of old wind tie with new fittings including painting two or more coats with anticorrosive bitumastic paint of approved brand and manufacturer over and including priming coat of ready mixed zinc chromate yellow primer of approved brand. (Bitumastic paint and primer free issue from BHEL store.)	15.00	metre	0.0633
13	Ana 14.54.1	Painting with synthetic paint of approved brand and manufacture of required colour to give an even shade: (Synthetic enamel paint free issue by BHEL store) One or more coats on old work.	50.00	sqm	0.1074
14	Ana 14.55.1	Painting with aluminium paint of approved brand and manufacture to give an even shade: One or more coats on old work (Excluding cost of Aluminium paint and putty which shall be issued free of cost from BHEL store).	30.00	sqm	0.0632
15	15.3	Demolishing R.C.C. work manually/ by mechanical means including stacking of steel bars and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge.	20.00	cum	1.7066

FACTORY CIVIL CONSTRUCTION & MAINTENANCE DIVISION

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Price Schedule A : Annexure I

Name of work : Structural steel repair/renovation/ modification work inside factory premises.

S.No.	DSR12	Description of item	Qty.	Unit	% Weightage of item amount against total amount
16	15.19	Dismantling steel work manually/ by mechanical means in built up sections without dismembering and stacking within 50 metres lead as per direction of Engineer-in-charge.	49150.00	Kg	4.4983
17		Dismantling roofing including ridges, hips, valleys and gutters etc., and stacking the material within 50 metres lead of :			
(a)	15.28.1	G.S. sheet	10.00	sqm	0.0398
(b)	15.28.2	Asbestos sheet	460.00	sqm	0.8661
18	15.41	Dismantling cement asbestos or other hard board ceiling or partition walls including stacking of serviceable materials and disposal of unserviceable materials within 50 metres lead.	15.00	sqm	0.0207
19	15.57	Dismantling aluminium/ Gypsum partitions, doors, windows, fixed glazing and false ceiling including disposal of unserviceable surplus material and stacking of serviceable material with in 50 meters lead as directed by Engineer-in-charge.	30.00	sqm	0.0416
Total:					95.1247

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FACTORY CIVIL CONSTRUCTION & MAINTENANCE DIVISION

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Price Schedule A : Annexure II

Name of work : Structural steel repair/renovation/ modification work inside factory premises.

S. No	Description of items	Qty.	Unit	% Weightage of item amount against total amount
1	Repairing of steel window of any size with greasing & oiling of window hinges if require and fixing of steel handles, repairing work including welding. Hinges will be provided by the contractor & cost of hinges will be included in the quoted rate. (Peg stay & handles will be provided by BHEL free of cost.)	4.00	sqm	0.0550
2	Dismantling of wooden ceiling or floor, A.C sheets ceiling or walling, wall and ceiling with board of any type and thickness (fabric pulp insulation including cover fillets or plaster etc.) with battens etc.	30.00	sqm	0.0414
3	Providing & fastening chemical capsule Anchoring in RCC member using HILTI, FISCHER or equivalent, adhesive, capsule & Galvanised anchor rod of steel grade 5.8 complete with nuts & washer including drilling holes of required dia & depth using hammer drill etc complete. To arrest dust & dirt generated during drilling operation, vaccum dust collector should be deployed in area of operation or the area of operation should be cordoned-off by making temporary enclosure for which enclosure material shall be supplied by BHEL free of cost. The rate should be inclusive of all material, labour, tools & tackles etc. complete unless specified otherwise. The job of anchoring shall, preferably, be carried out by an authorized applicator of the concerned manufacturer of which anchors are proposed.			
a)	M16 x 125	6.00	Each	0.8263
b)	M20 x 170	6.00	Each	1.2395
4	Erection of structural steel works at all heights consisting of, railing, clamps, purlins with channels & angles, M.S. flat, M.S. tubes, supports including all connections as per detailed drawings connected steel works etc. cleats, gusset plates all bolts, nuts, washers ,base plates, anchor bolts etc., as per detailed drawings cutting welding and painting 1 coats of red oxide primer before erection & 2 coats of synthetic enamel paint/Aluminium paint of approved brand & colour after erection complete. Advani make electrodes or other approved make electrodes are to be used. All bolts, nuts, washers, gas, electrodes are in contractor's scope. Fabrication to be done as per I.S. codes of latest revision. Structural steel ,primer and paint shall be provided by BHEL free of cost.			
	Only erection.	1500.00	Kg	0.4955

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Price Schedule A : Annexure II

Name of work : Structural steel repair/renovation/ modification work inside factory premises.

S. No	Description of items	Qty.	Unit	% Weightage of item amount against total amount
5	Fixing non-asbestos high impact Polypropylene reinforced cement 6 mm thick/ Asbestos cement corrugated sheets (as per IS : 14871) roofing up to any pitch and fixing with polymer coated J or L hooks, bolts and nuts 8 mm dia G.I. Plain and bitumen washers or with self drilling fastener and EPDM washers etc. complete excluding the cost of purlins, rafters and trusses corrugated sheets and including cutting to size and shape wherever required(Including the cost of fixtures but excluding the cost of sheets which shall be supplied free of cost from BHEL).	330.00	sqm	1.1891
6	Fixing ridges and hips in non-asbestos fibre cement high impact polypropylene reinforced roofing sheet / A.C. sheet roofing with suitable fixing accessories or self drilling fastener and EPDM washer etc. complete. (Excluding cost of ridges which shall be issued free of cost from BHEL). Corrugated serrated adjustable ridges	20.00	metre	0.0502
7	Fixing non-asbestos fibre cement high impact Polypropylene reinforced/Asbestos cement roofing accessories in all colours with Polymer coated J or L hooks, bolts and nuts and or G.I. Seam bolts and nuts, G.I. Plain and bitumen washers or with self drilling fastener and EPDM washers etc. complete:(Excluding cost of North light curves which shall be issued free of cost from BHEL). North light curves	6.00	metre	0.0167
8	Fixing corrugated / trapezoidal metal sheet roofing including vertical/ curved surface fixed with polymer coated J or L hooks, bolts and nuts 8 mm diameter with bitumen and G.I. Limpet washers or with G.I. Limpet washers filled with white lead and including a coat of approved steel primer and two coats of approved paint on overlapping of sheets complete (up to any pitch in horizontal/ vertical or curved surface) excluding the cost of purlins, rafters and trusses and including cutting to size and shape wherever required. (Excluding the cost of metal sheets, primer and painting which shall be issued free of cost from BHEL store.) 0.5 mm to 1.00 mm thick metal sheet	30.00	sqm	0.2244
9	Fixing of flashings, ridges, cappings, corner pieces etc. made of GI / MS / Galvalume sheet of thickness 0.5mm to 1 mm in required shape & size & fixed with stitching screw including cost of STSD screw, washer etc. but excluding cost of sheets which shall be supplied by BHEL free of cost.	30.00	metre	0.1737

FACTORY CIVIL CONSTRUCTION & MAINTENANCE DIVISION

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Price Schedule A : Annexure II

Name of work : Structural steel repair/renovation/ modification work inside factory premises.

S. No	Description of items	Qty.	Unit	% Weightage of item amount against total amount
10	Fastening mechanical Anchoring in RCC member including drilling holes of required dia & depth using hammer drill etc complete. To arrest dust & dirt generated during drilling operation, vaccum dust collector should be deployed in area of operation or the area of operation should be cordoned-off by making temporary enclosure for which enclosure material shall be supplied by BHEL free of cost. The rate should be inclusive of all , labour, tools & tackles etc. complete unless specified otherwise. (Mechanical anchor shall be supplied by BHEL free of cost)			
	Size 15 mm to 25 mm	60.00	number	0.5124
11	Extra for structural steel work riveted ,bolted or welded in built up sections, trusses and framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete for every additional height of one meter or part thereof beyond 8.0 metres. (Structural steel & primer will be issued free of cost from BHEL stores).			
		2660.00	Kg per metre height	0.0510
Total of ANNEXURE (I) & ANNEXURE (II)				4.8752
Total of ANNEXURE (I) & ANNEXURE (II)				100.00

Note:

- 1 Dismantling of Galvalume sheets/Aluminium sheets and dismantling of polycarbonate sheets/FRP sheets shall also be paid under item nos. 17 (a) and 17 (b) of Annexure-I respectively.
- 2 In the event of modification carried out in existing structural steel frame member/ component / cabin/assembly etc. , fabrication shall be paid only for the weight of that particular structural member(s) added to the assigned frame member/ component / cabin/assembly etc.

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SCHEDULE 'B'

Name of work : Structural steel repair/renovation/ modification work inside factory premises.

1	Cement	}	free Issue from BHEL Stores
2	Reinforcement bar/MS plain bar		
3	AC sheet/Non- AC sheet		
4	Structural steel		
5	Primer		
6	Synthetic Enamel Paint		
7	Aluminium paint		
8	Ridges		
9	North light curves(Galvalume/Asbestos cement)		
10	G.S. sheet		
11	Material for temporary enclosure (on returnable basis)		
12	Peg stay & handles		
13	Bitumastic paint		
14	Mechanical fastener		

SCHEDULE 'C'

Name of work : Structural steel repair/renovation/ modification work inside factory premises.

1	Hire charges. i) Drill machine @ 252.00/- per day ii) Jack Hammer @108.00/- per day	}	(Subject to availability)
2	Drill machine/jack hammer rod Rs. 100.00 per rod		
3	Electricity charges shall be recovered from the contractor @ Rs.66.00/- per M.T. of fabrication of structural steel		

Seal & Signature of Contractor